

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 25

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JAMES W. PROSCIA, KEITH B. WILLIAMS and GENE P. RECK

Appeal No. 95-3462
Application No. 08/083,206¹

ON BRIEF

Before CAROFF, PAK and WARREN, Administrative Patent Judges.

CAROFF, Administrative Patent Judge.

DECISION ON APPEAL

This decision on appeal relates to the final rejection of claims 1-18, all the claims pending in the involved application.

¹ Application for patent filed June 24, 1993. According to the appellants, the application is a continuation of Application No. 07/806,174, filed December 13, 1991.

Appeal No. 95-3462
Application No. 08/083,206

The claims on appeal are directed to a chemical vapor deposition (CVD) process involving the formation of a metal nitride.

Appellants indicate on page 3 of their appeal brief that the patentability of the appealed claims is not argued separately. Accordingly, all of the claims stand or fall with representative claim 1 which reads as follows:

1. A chemical vapor deposition process for preparing a metal nitride, comprising contacting a metal halide with an amine at a temperature sufficient to form a metal nitride.

The examiner relies upon the following four prior art references of record to support multiple rejections of the claims:

Bohg et al. (Bohg) 1978	4,091,169	May 23,
Gordon 1985	4,535,000	Aug. 13,
Goodman et al. (Goodman) 7, 1990	4,946,712	Aug.
Matsumura 1987	62-70208 (Japan)	Mar. 31,

The following rejections constitute the basis for this appeal:

I. Claims 1-3, 5 and 7-9 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Matsumura.

II. Claims 4, 6 and 10-18 stand rejected for obviousness under 35 U.S.C. § 103 in view of Matsumura.

III. Claims 1-18 stand rejected for obviousness under 35 U.S.C. § 103 in view of either Goodman or Gordon, with each taken in combination with Bohg.

We affirm the rejections which are based upon Goodman, Gordon and Bohg essentially for the reasons presented in the examiner's answer. On the other hand, we reverse those rejections which are based upon the Matsumura reference.

As for Matsumura, we agree with appellants that the reference does not teach reacting a metal halide with an amine to form a metal nitride via CVD. As we construe appellants' claims, the step of contacting a metal halide with an amine to form a metal nitride is to be performed by a CVD method. In contrast, Matsumura suggests reacting a metal halide with an amine in the liquid phase at a relatively low temperature. While Matsumura does mention that CVD techniques have been used in the prior art to form metal nitrides, there is no indication that these prior art CVD techniques involved contacting a metal halide with an amine.

We now turn to the rejections grounded upon the combined teachings of Goodman or Gordon with Bohg. Appellants do not seriously take issue with the propriety of the combination of references. Instead, appellants urge that application of the collective teachings of the references, i.e. substitution of amine for the ammonia reactant in Goodman or Gordon as suggested by Bohg, would be expected to result in the formation of a carbon-containing metal nitride rather than a "substantially carbon-free" metal nitride. As noted by the examiner, this argument is not persuasive since the appealed claims, as presently constituted, do not preclude the formation of a metal nitride which contains carbon.

Moreover, we cannot agree with the comment on page 6 of appellants' brief to the effect that the limitation "substantially carbon-free" is somehow inherent in the claims. We decline to read limitations into the claims which are not explicitly recited therein. See In re Prater, 415 F.2d 1393, 1404-1405, 162 USPQ 541, 550-551 (CCPA 1969). The term "nitride," as used in the claims, is apparently a generic term which embraces carbonitrides as well as those that are substantially carbon-free. Appellants have presented no

Appeal No. 95-3462
Application No. 08/083,206

evidence or convincing explanation to the contrary. Indeed, appellants apparent need for using the qualifying expression "substantially carbon-free" on page 5, line 14, of their specification (in order to distinguish over carbonitrides of the prior art) represents an implicit acknowledgement of the generic reach of the term "nitride."

Appeal No. 95-3462
Application No. 08/083,206

In the event of further prosecution of the present claims by appellants (as in a continuation application), we suggest that the examiner revisit the Reedy and Schintlmeister references cited on page 2 of appellants' specification since they apparently teach the CVD reaction of a metal halide with an amine to form a metal carbonitride film. The present claims fail to distinguish over such prior art processes since, as previously noted, the claims do not preclude formation of a carbon-containing metal nitride; nor is it clear that appellants' metal nitrides in fact differ from the carbonitride products of the prior art.

Appeal No. 95-3462
Application No. 08/083,206

For the foregoing reasons, the decision of the examiner
is affirmed.

AFFIRMED

MARC L. CAROFF)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
CHARLES F. WARREN)	
Administrative Patent Judge)	

Appeal No. 95-3462
Application No. 08/083,206

Lorraine S. Melotik
Ford Motor Company
Parklane Towers East - Suite 911
Dearborn, MI 48126

Appeal No. 95-3462
Application No. 08/083,206

MLC/jrg

JENINE GILLIS

Appeal No. 95-3462
Serial No. 08/083,206

Judge CAROFF

Judge WARREN

Judge PAK

Received: 27 Jul 98

DECISION: AFFIRMED

Send Reference(s): Yes No
or Translation(s)

Panel Change: Yes No

3-Person Conf. Yes No

Heard: Yes No

Remanded: Yes No

Index Sheet-2901 Rejection(s): _____

Acts 2: _____

Palm: _____

Mailed:

Updated Monthly Disk: _____

Updated Monthly Report:
